

APPENDIX A – LISTING OF ALL CLAIMS

1-140. (Canceled)

141. (Previously Presented) An apparatus for processing digital data, the apparatus comprising:

a processor; and

a memory connected to the processor and including executable instructions that when executed by the processor, cause the processor to perform:

receiving digital data including a plurality of transport packets having a header and a scrambled data unit;

detecting a header of a first transport packet included in the plurality of transport packets;

extracting a marker from the header of the first transport packet;

extracting first control data from the extracted marker;

descrambling, using the same first control data and the same descrambler, both scrambled digital video and audio data included in the scrambled data unit of the first transport packet and one or more succeeding scrambled data units in the transport packets following the first transport packet; and

determining a number of transport packets that have been processed, and

when the processor determines the number of transport packets is a minimum of a multiple of four transport packets, the executable instructions further cause the processor to perform

detecting the header of a next transport packet included in the plurality of transport packets;

extracting a marker from the header of the next transport packet;

extracting second control data from the extracted marker; and

descrambling, using the same second control data and the same descrambler, both scrambled digital video and audio data included in the scrambled data unit of the next transport packet and one or more succeeding scrambled data units in the transport packets following the next transport packet.

142. (Previously Presented) The apparatus of claim 141, further comprising:

initializing the descrambler using the first and second control data for performing the descrambling operation.

143. (Previously Presented) The apparatus of claim 141, wherein the executable instructions further cause the processor to perform
descrambling each scrambled data unit, except for the header, in each of the plurality of data blocks.

144. (Canceled).

145. (Previously Presented) The apparatus of claim 141, wherein at least two of the scrambled data units and the header including the control data comprise one data group, the header including the control data, and
wherein the executable instructions further cause the processor to perform:
separating the at least two scrambled data units and the header from one data group before the descrambling.

146. (Previously Presented) The apparatus of claim 145, wherein the data group includes at least two packets, at least the first packet including one data unit and the header, and
wherein the executable instructions further cause the processor to perform:
demultiplexing the at least two packets from one data group.

147. (Previously Presented) The apparatus of claim 145, wherein the executable instructions further cause the processor to perform:
detecting the header from the received data group; and
detecting the control data within the header.

148. (Previously Presented) The apparatus of claim 145, wherein the data group further includes copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information

indicating a number of times the digital data has been copied, and the allowable generation information indicating a number of permitted copies of the digital data, and

wherein the executable instructions further cause the processor to perform controlling a copy prevention function such that copying of the digital data is not permitted if the copy prevention information indicates that copying of the digital data is not permitted.

149. (Previously Presented) The apparatus of claim 141, wherein the descrambling of the scrambled digital units by the descrambler is performed only if the copy prevention information indicates that the copying of the digital data is permitted.

150. (Previously Presented) A data storage medium accessible by a digital data processing apparatus including a descrambler, the data storage medium comprising:

a data area for storing digital data including a plurality of data blocks having a header and a scrambled data unit, the header in a first data block among the plurality of data blocks including first control data, one or more of the scrambled data units and the first control data being stored on the data storage medium, the first control data included in the first data block being used to descramble the first data block and a minimum of a multiple of four succeeding data blocks among the plurality of data blocks,

wherein the first control data is used for controlling a parameter of a descrambling operation performed by the descrambler of the digital data processing apparatus, and the same first control data is used for the first and the minimum of four succeeding scrambled data units,

wherein each of the scrambled data units includes scrambled digital video data or scrambled digital audio data stored on the data storage medium, wherein both the scrambled digital video data and the scrambled digital audio data are descrambled by the same descrambler, and

wherein after the minimum of the multiple of four transport packets have been descrambled, the descrambler is initializing based on second control data included in a different header of a corresponding data block for descrambling a different set of data blocks.

151. (Canceled).

152. (Previously Presented) The data storage medium of claim 150, wherein each scrambled data unit is descrambled while the header is not descrambled, in each of the plurality of data blocks.

153. (Canceled).

154. (Previously Presented) The data storage medium of claim 150, wherein at least two packets comprise one data group, at least first packet including one scrambled data unit and the header, the header including the control data.

155. (Previously Presented) The data storage medium of claim 150, wherein the one or more scrambled data units and the control data comprise one data group, the data group further including copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and

the copy prevention information being used for a copy prevention function in a reproducing/reproducing/recording apparatus such a manner that copying of the digital data is not permitted if the copy prevention information indicates that the copying of the digital data is not permitted.